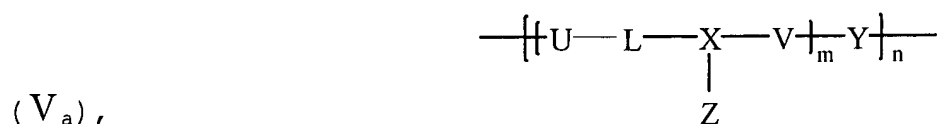


Amendments to the Claims:

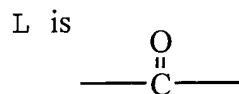
This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A biodegradable cationic polymer, which has amino groups in a backbone and side chains for delivering nucleic acids into a cell, and a formula (V_a) of the biodegradable cationic polymer shown as below:

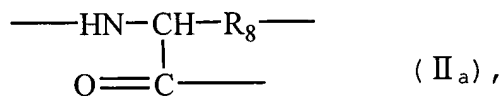


wherein

U is $(R_1-O)_d$, in which R_1 is a C_2 - C_{20} alkylene or substituted alkylene radical, d is an integer of 4 to 200,



X is an amino acid group containing additional amino or amide group of the formula (II_a) :



in which R_8 is selected from the group consisting of $-\text{CH}_2\text{CONH}_2-$,

$-\text{CH}_2\text{CH}_2\text{CONH}_2-$, and $-\text{CH}_2\text{CH}_2\text{CH}_2\text{NH}_2-$,

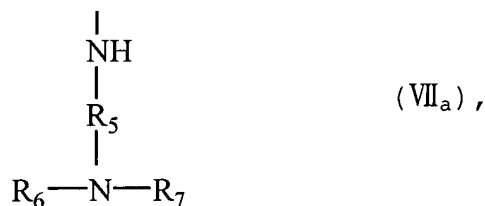
V is $-\text{COO}-$,

Y is an amino group of the formula (VI_a) :



in which R₂ is hydrogen or C₁-C₂₀ alkyl radical, R₃ and R₄ is the same C₁-C₂₀ alkylene radical,

Z is an another amino group of the formula (VII_a) :



in which R₅ is C₂-C₂₀ alkylene radical, R₆ and R₇ are the same or different C₁-C₅ alkyl radicals,

m is an integer of 1 to 10, and

n is an integer of 1 to 20.

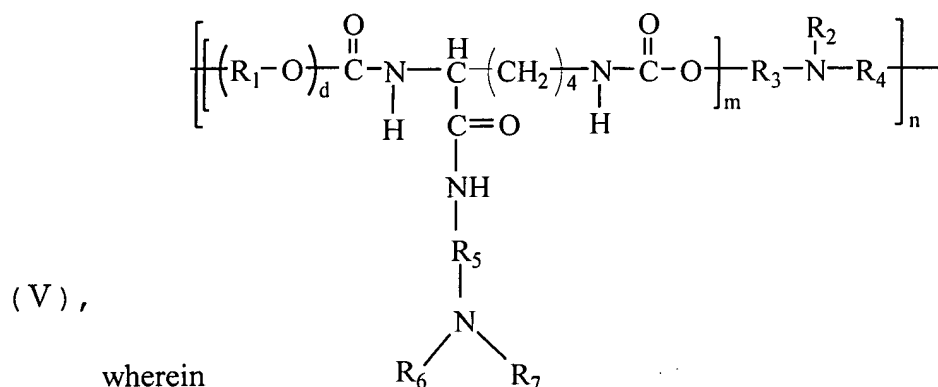
2. (Original) The biodegradable cationic polymer of claim 1, wherein R₁ is selected from the group consisting of C₂-C₅ alkylene radicals.

3. (Original) The biodegradable cationic polymer of claim 2, wherein R₁ is ethylene radical, d is an integer of 4 to 200.

4. (Original) The biodegradable cationic polymer of claim 2, wherein R₁ is propylene radical, d is an integer of 9 to 34.

5. (Currently Amended) The biodegradable cationic polymer of claim 1, wherein X is preferably $-\text{CH}_2\text{CH}_2\text{CH}_2\text{NH}_2-$.

6. (Original) A biodegradable cationic polymer, which has amino groups in a backbone and side chains for delivering nucleic acids into a cell, and a formula (V) of the biodegradable cationic polymer shown as below:



R_1 is a C_2-C_{20} alkylene or substituted alkylene radical, d is an integer of 4 to 200,

R_2 is hydrogen or C_1-C_{20} alkyl radical,

R_3 and R_4 is the same C_1-C_{20} alkylene radical,

R_5 is C_2-C_{20} alkylene radical,

R_6 and R_7 is the same or different C_1-C_5 alkyl radical,

m is an integer of 1 to 10, and

n is an integer of 1 to 20.

7. (Original) The biodegradable cationic polymer of claim 6, wherein R_1 is selected from the group consisting of C_2-C_5 alkylene radicals.

8. (Original) The biodegradable cationic polymer of claim 7, wherein R_1 is ethylene radical, d is an integer of 4 to 200.

9. (Original) The biodegradable cationic polymer of claim 7, wherein the R_1 is propylene radical, d is an integer of 9 to 34.

10-39. (Cancelled)